DRAFT WILDLAND FIRE PLAN MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Monitoring Requirement	Responsible Entity	Monitor	Action by Monitor	Timing & Frequency	Documentation
Erosion and Sedimentation					- 1	L
ER-1. The Department shall implement the following additional Best Management Practices when conducting vegetation management on slopes greater than 10 percent, within 25 feet of the top of a creek, or within a creek:						
(see below)						
To the extent feasible, field crews shall not create foot paths to and from the work areas that remove leaf litter and expose mineral soils to potential future erosion. If crews must use a single path that becomes worn and vulnerable, the path shall be rehabilitated after vegetation management to reduce erosion potential. Rehabilitation would include replacement of leaf litter and chippings on the path, and piling dirt and organic matter at periodic intervals along the path to act as water bars and prevent concentration of flows.	Ensure that the measure is implemented in the field	FD	WFS or designee	Monitor and direct field personnel as necessary	During days that field crews are actively conducting vegetation management	Daily logs and post-project monitoring checklist (small projects) or report (large projects)
■ Crews shall avoid stripping the leaf litter from slopes or creek banks when dragging vegetation from the cutting location to the chipper. If the removal of vegetation and leaf litter is unavoidable, the Department shall restore the affected areas by spreading leaf litter and chippings back over the stripped areas.	Ensure that the measure is implemented in the field	FD	WFS or designee	Monitor and direct field personnel as necessary	During days that field crews are actively conducting vegetation management	Daily logs and post-project monitoring checklist (small projects) or report (large projects)
For any vegetation management work in a creek, or within 25 feet of the top of bank, the Department shall prepare an erosion control plan that evaluates the potential for causing erosion from vegetation management actions, and identifies BMPs to avoid significant erosion impacts through modifying	Confirm that erosion control plan has been prepared, and ensure that BMPs are properly installed, implemented, and/or maintained.	FD	WFS or designee	Review plan; confirm implementation of BMPs by monitoring in the field; direct field	Confirm plan preparation prior to work; monitor implementation of BMPs prior to work; monitor, if	Daily logs and post-project monitoring checklist (small projects) or report (large

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vegetation removal methods, utilizing alternative access methods, and/or rehabilitating affected areas after the work.	Plan to be prepared by WFS with input from specialists, as necessary	7		personnel as necessary	necessary, during days that field crews are actively conducting vegetation management	projects)
If the Department field supervisor determines that an erosion potential has been created due to vegetation reduction work, and that the spreading of leaf litter and chippings is insufficient protection from future winter rains, the Department shall consider temporary biodegradable erosion control blankets and barriers, such as coconut fiber blankets and logs. These materials shall be placed strategically to reduce the amount and velocity of flow over the affected areas, to prevent gullying and soil loss by water erosion, and to facilitate the natural regeneration and colonization by native plants.	Ensure that the erosion control materials are installed properly	FD	WFS or designee	Monitor installation, and direct field personnel as necessary	During days that field crews are installing erosion control BMPs	Daily logs and post-project monitoring checklist (small projects) or report (large projects)
Biological Resources						
BIO-1. To avoid direct impacts to the special status species that could occur in the Fire Plan vegetation management units (see Table 3-13 of the EIR), the Department shall consult with a qualified biologist during the preparation of work plans for each unit that could support a special status species. Based on this consultation, the Department shall develop site-specific measures to avoid or reduce impacts to special status species known or likely to occur at the unit. A reconnaissance survey shall be conducted of the proposed work areas to identify biological sensitivities such as: (1) locations of oak trees and oak woodlands, where the Department would implement BMPs to reduce impacts to oaks; (2) top of creek bank, in the event that work will occur near the creek; (3) potential habitat for special status plants or wildlife species; and (4) raptor nests. Based on this information, the Department shall modify the proposed vegetation management actions to reduce	Ensure that site specific measures are implemented in the field. WFS to prepare site-specific measures to protect special status species, if present, based on input from a qualified biologist, including observations and information from a reconnaissance survey of the work areas. Measures to be included the work plan for that site.	FD	WFS or designee	Monitor and direct field personnel as necessary	During days that field crews are actively conducting vegetation management	Work plan for the specific site will include measure to protect special status species. Daily logs and post-project monitoring checklist (small projects) or report (large projects)

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impacts to special status species.		,				
The Department shall consider the following modifications: (1) delay the work until the late fall (e.g., September or later) if it appears that nesting by riparian birds is still ongoing in August; (2) avoid disturbance to any trees with occupied or unoccupied raptor nests; (3) avoid or reduce the amount of vegetation management in areas that could support special status species; (4) consolidate foot paths and work corridors in areas with well developed native scrub and oak woodland in order to reduce the amount of ground disturbance; (5) include a biological monitor if there is a potential for direct impacts; (6) implement post-treatment restoration efforts to facilitate the use of the affected areas, and the nearby areas, by the special status species; and (7) further restrict or prohibit the use of herbicides for post treatment weed control.						
BIO-2. During the preparation of work plans for all vegetation management units under the Plan, the Department shall identify the extent of non-native weeds in the fuel reduction areas, and develop a plan to reduce or eradicate these plants from the work areas during the initial treatment, and/or during post-treatment maintenance. The plan shall include post-treatment inspections and weed treatment at suitable intervals until the next fuel reduction project at that unit, as funding allows.	Ensure that weeds are identified prior to work, that eradication occurs according to plan, and that post-treatment weed removal is implemented. WFS to prepare map of weeds to be removed, and select an appropriate weed removal method, to be included in the work plan for that site. WFS to also prepare a post-treatment weed removal plan that specifies timing, level of effort, and performance goals for post-treatment weed removal.	FD	WFS or designee to monitor weed removal during vegetation management treatment, and during post-treatment weed removal efforts	Monitor and direct field personnel as necessary	During days that field crews are actively weed removal	Work plan for the specific site will include weed removal plan. Daily logs and post-project monitoring checklist (small projects) or report (large projects) for initial weed removal. Annual reports on weed removal effort and success

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		,				during the post-treatment period.
BIO-3. Prior to conducting work in a creek, or within 15 feet of the top of bank, the Department shall consult with a qualified biologist during the preparation of the work plan to identify methods to achieve the vegetation management without significant impacts to riparian resources. Based on this consultation, the Department shall develop site-specific measures to avoid or reduce impacts to riparian resources. These measures shall include (among others) the following: a) To the extent feasible, all work near a creek shall be conducted when surface water is absent. b) Vegetation shall not be thinned, removed, or pruned, nor shall dead wood be removed, within 15 feet of a creek channel when flowing water is present c) The only plants that can be removed from a creek bed (that is, below the line of the ordinary high water mark) are live or dead eucalyptus trees and dead native shrubs/trees that are deemed to be a fire hazard, and invasive exotics (including, but not limited to giant reed). d) Cut stems, tree trunks or other vegetative debris	Ensure that site specific measures are implemented in the field during initial vegetation management treatment in or near creeks. WFS to prepare site-specific measures to protect creeks, riparian resources, and water quality based on input from a qualified biologist. Measures to be included the work plan for that site. Any post-treatment restoration included will not require maintenance and monitoring, as these plantings are designed to be one-time, opportunistic efforts to stimulate natural regeneration processes.	FD	WFS or designee	Monitor and direct field personnel as necessary	During days that field crews are actively conducting vegetation management in or near creeks	Work plan for the specific site will include site specific measures. Daily logs and post-project monitoring checklist (small projects) or report (large projects)
shall not be dragged across a creek bed that contains riparian vegetation, wetlands, or surface water e) No trees shall be felled across a creek while there is flowing water						
f) No eucalyptus chipping or cut stems shall be left on the creek banks or any upper stream terrace, when present.						
g) Chipped native vegetation shall not be placed on creek banks, unless a qualified biologist determines that placement of the chipping would provide needed erosion protection without an adverse impact on						

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aquatic habitats and water quality in the creek. Native plant chippings can be spread outside the top of bank. h) To the extent feasible, the Department shall incorporate low-cost riparian restoration measures into vegetation management work in creeks when the work reduces the canopy coverage, such as when large eucalyptus trees are thinned from a creek. These measures would include installing inexpensive and easy-to-establish riparian plants such as willow and mulefat stems, blackberry plants, or mugwort plants. This restoration would be a one-time, opportunistic event at the work site.						
BIO-4. No herbicide use shall occur within the 15-foot wide exclusion zone at the top of the creek bank, on the creek bank, or in the creek bed unless the herbicide use is to remove invasive exotics during a post-treatment maintenance project that is authorized in a creek under the Fire Plan. Herbicide use in the creek channel shall be conducted in accordance with a site specific plan prepared by the Department in consultation with a qualified biologist, consistent with the City's IPM, and consistent with all other mitigation measures and environmental BMPs under the Fire Plan.	Ensure that herbicide use is authorized under the Plan, that the application procedures will follow the City's IPM, and that EIR mitigation measures and environmental BMPs under the Fire Plan are implemented in the field during initial vegetation management treatment in or near creeks. WFS to prepare herbicide need analysis, description of application methods, analysis of consistency with the City's IPM, and listing of site-specific measures to protect creeks, riparian resources, and water quality. WFS to consult with qualified biologist, as necessary.	FD	WFS or designee	Monitor and direct field personnel as necessary	During days that field crews are actively conducting vegetation management in or near creeks	Work plan for the specific site will include herbicide plan. Daily logs and post-project monitoring checklist (small projects) or report (large projects)

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Visual Resources						
 VIS-1. The following measures should be considered when conducting vegetation management on private and public parcels: Straight line boundaries and other strong linear configurations that tend to detract from the natural appearance of the landscape should be avoided as much as practicable. Vegetation removal or thinning should follow natural or existing landscape features such as streamcourses, vegetation type lines, ridgetops, and existing roads. Fireline edges on the outside-of-the-burn side should be feathered into the natural landscape, with brush cuttings used to disguise the lines. 	Ensure that the feasible measures are implemented in the field	FD	WFS or designee	Monitor and direct field personnel as necessary	During days that field crews are actively conducting vegetation management	Daily logs and post-project monitoring checklist (small projects) or report (large projects)
Cultural Resources					1	
CR-1. Prior to the initiation of fuel reduction work, Department personnel shall instruct the field crew of the potential to uncover unanticipated archeological deposits and features. If any suspected archeological artifacts, shell, or bone are discovered, the Department shall temporarily halt work in the area of the discovery, and a City-approve archeologist shall evaluate the find, and provide a recommendation on how to proceed with the fuel reduction work without substantially affecting archeological resources.	Ensure that the field crews are instructed prior to the work, and that procedures in the mitigation measure are implemented in the field a necessary	FD	WFS or designee	Instruct field personnel; respond to field personnel and halt work when a discovery is made, as necessary	During days that field crews are actively conducting vegetation management	Daily logs and post-project monitoring checklist (small projects) or report (large projects)
Air Quality						
AQ-1. Trucks transporting cut vegetation material shall be covered from the point of origin. AQ-2. The haul route(s) for all construction-related trucks, three tons or more, entering or exiting the sites, shall be approved by the Transportation Engineer.	Ensure that the feasible measures are implemented in the field. Ensure that burn permits are acquired, and that the conditions of the permit are	FD	WFS or designee	Monitor and direct field personnel as necessary.	During days that field crews are actively conducting vegetation management	Daily logs and post-project monitoring checklist (small projects) or report (large projects)

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AQ-3. After clearing, grading, earth moving or excavation is completed, the entire area of disturbed soil shall be treated to prevent wind pickup of soil. This may be accomplished by: Seeding and watering until vegetative cover is grown; spreading soil binders; sufficiently wetting the area down to form a crust on the surface with repeated soakings as necessary to maintain the crust and prevent dust pickup by the wind; other methods approved in advance by the Air Pollution Control District.	followed in the field. Acquire approval of haul routes by the Transportation Department					
AQ-4 . All prescribed burns shall be conducted in compliance with applicable SBAPCD rules and regulations and appropriate permits required shall be obtained from the SBAPCD.						